UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF THE
REGIONAL ADMINISTRATOR

February 17, 2009

James F. Bennett
Chief, Branch of Environmental Assessment
Minerals Management Service
U.S. Department of the Interior
381 Elden Street
Mail Stop 4042
Herndon, VA 20170

Re: Cape Wind Energy Project Final Environmental Impact Statement, January 2009 (CEQ #20090006)

Dear Mr. Bennett:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act, we have reviewed the Final Environmental Impact Statement (FEIS) for the Cape Wind Energy project in Nantucket Sound off the coast of Massachusetts.

Consistent with the DEIS, the FEIS details Cape Wind Associates, LLC's proposal to install a wind-powered generating facility in the Horseshoe Shoal region of Nantucket Sound, consisting of 130 wind turbine generators (WTGs), an electrical service platform (ESP), a series of inner array cables connecting the WTGs to the ESP, and a 12.5-mile-long submarine transmission cable system from the ESP to landfall in Yarmouth, Massachusetts. According to the FEIS, a total of 820 to 866 acres of submerged land would be temporarily disturbed. Each WTG would be 440 feet tall at its highest point and the steel framed ESP would have a footprint of approximately 100 feet by 200 feet and be constructed approximately 39 feet above the water surface. The wind turbines and ESP would occupy 25 square miles of Nantucket Sound and be approximately 5.2 miles from the closest point of land--Point Gammon on Cape Cod. The bathymetry of Nantucket Sound is irregular with charted water depths ranging between one and 70 feet. The project would be capable of producing an average generation capacity of approximately 182 megawatts (MW).

EPA has been involved in the review of the Cape Wind project since 2001 when the U.S. Army Corps of Engineers served as the lead federal agency with the responsibility for preparation of the EIS. The passage of the Energy Policy Act of 2005 amended the Outer Continental Shelf (OCS) Lands Act and established the Department of the Interior as the lead agency (through the Minerals Management Service (MMS)) for NEPA compliance for leasing of OCS areas for renewable energy projects. The purpose of the proposed

project, as described in the FEIS, is to provide an alternative energy facility using wind resources off the coast of New England to make a substantial contribution to enhancing the region's electrical reliability and achieving renewable energy goals under Massachusetts and regional renewable portfolio standards (RPS).

EPA continues to support the development of well planned and appropriately sited renewable energy generation facilities that can help meet both Massachusetts and regional goals. These facilities, in combination with other measures, will help to meet goals for renewable energy production and the reduction of greenhouse gas emissions such as those established by the New England Governors and Eastern Canadian Premiers through the 2001 Climate Change Action Plan Agreement. Specifically, the Climate Action Plan goals call for reductions to be made in CO2 emissions to 1990 levels by 2010, and to 10% below 1990 levels by 2020. In the long-term, overall CO2 emissions reductions of 75% to 80% below 2003 levels may be required. EPA continues to believe the project could make a substantial contribution to both the need for additional renewable energy sources and the need to meet stated greenhouse gas emission reduction goals.

EPA's comments on the DEIS addressed alternatives, characterization of baseline conditions and impact prediction, marine and air issues, and monitoring/mitigation. We have reviewed responses to our comments in the FEIS and continue to believe that the project scale and remaining questions regarding project impacts highlight the need for a comprehensive and adaptable monitoring, mitigation, and management program. As this plan for the project is not fully developed in the FEIS we recommend that MMS seek interagency input to complete the plan so that it can be included in the Record of Decision (ROD) for the project. Our comments concerning the monitoring and mitigation component of the FEIS as well as air quality analysis/permitting and marine impacts are provided in the attachment to this letter. We request that MMS address all substantive comments received on the FEIS in the ROD and to coordinate closely with relevant state and federal agencies during its development.

Please feel free to contact me or Timothy Timmermann of the Office of Environmental Review at 617/918-1025 if you wish to discuss these comments further.

Sincerely,

Ira W. Leighton
Acting Regional Administrator

Enclosure

cc: (list on following page)

cc:

Governor Deval Patrick
Senator Edward Kennedy
Senator John Kerry
Representative William Delahunt
Tom Chapman, United States Fish and Wildlife Service
Patricia Kurkul, National Marine Fisheries Service-Northeast Region
Jim Gordon, Cape Wind

Additional Detailed Comments
FEIS for the Cape Wind Energy Project

Alternatives

EPA's comments on the DEIS noted that the DEIS was not clear on how the scale of the smaller project alternative was established and whether it was based on economic considerations (for example where up front project capital costs were expected to equal project revenues) or other factors. We asked MMS to address this issue and whether this or another intermediate size alternative would perform substantially better economically or environmentally. We also noted that discussions about the economic viability of the smaller scale project are complex given statements in the DEIS that the proposed project and other sites are not economically viable. The discussion of economic viability provided in the FEIS in Section 3.2.1.2 is the same as the DEIS, as is the description of the smaller alternative. Consistent with the DEIS, Section 3.2.1.2 of the FEIS states that the site of the proposed action in Nantucket Sound "has the greatest economic potential". In addition, the information contained in the Economic Model in Appendix F remains unchanged.

In the Comment Summary and Response Table in Volume 3 of the FEIS, comment C-6 notes that comments requested more analysis of smaller proposed actions. The response states that "MMS included a smaller scale alternative, phased alternative, no action alternative, as well as alternatives located outside of Nantucket Sound." This response provides a listing of the alternatives considered in the DEIS but is not a response to our question/comment. It would also have been helpful if the FEIS explained whether or not the project is economically feasible at this point given current prices/costs and provided a table or description of conditions that must be met for the project to cross the economic feasibility threshold. This information should be provided in the ROD so that agencies and the public have a clear understanding of when and under what circumstances the project would be constructed.

Establishment of Baseline Conditions and Projections of Project Impacts

Our comments on the DEIS highlighted the importance of MMS being able to compare project impacts to a comprehensive baseline. We requested that MMS clearly indicate what information was requested by expert agencies to establish baseline conditions, and, if those agencies' advice was not followed, explain the basis for such a decision with logic and reason. Based on our review of the FEIS, we were not able to find a specific breakdown of how these comments were addressed. We request that it be provided in the ROD.

Marine Issues

Benthic Monitoring/Mitigation

The FEIS explains that the Seafloor Habitat/Benthic Community Monitoring is proposed for the area within the Massachusetts 3 mile jurisdictional limit and it notes that it

"...may need to be modified with a monitoring or adaptive management program for the area outside the Massachusetts 3-mile (5.6km) jurisdictional limit." We encourage the MMS to specifically expand the Seafloor Habitat/Benthic Community Monitoring to include all federal and state waters to reflect the geographic scope of the impacts of the project. The ROD should reflect this change.

Electro Magnetic Field (EMF) Impacts

The FEIS notes a correlation between inferred EMF strength and avoidance by flounder at the Horns Rev and Nysted facilities. This is a potential concern for the proposed project, as flounder are an important benthic species along the New England coast. The FEIS at page 9-18 describes measures to reduce EMF including cable burial to a depth of 6 feet and notes that, "Since all of the proposed transmission cables contain grounded metallic shields, no or minimal electric fields exist beyond the cable itself." While these measures are helpful, it is still not clear whether or not the avoidance behavior will occur given the inconclusive nature of the EMF investigations referenced on page 9-3 for the Horns Rev and Nysted facilities.

Entrainment Losses

Page 5-154 of the FEIS discusses entrainment losses of fish and invertebrate eggs from cable jet plowing and indicates that 41.5 million fish eggs and 6.9 milliion fish larvae could be entrained. The FEIS notes "By contrast, the US EPA (2003) estimated that entrainment by a stationery water withdrawal at the relatively nearby Brayton Point Station resulted in the annual mortality of at least 16 billion fish eggs and larvae (including winter flounder, windowpane, bay anchovy and tautog)." We do not understand the purpose of the comparison and note that entrainment losses in Mount Hope Bay do not justify smaller losses at another location. Instead, effort should be focused on a discussion of the impact the project would bring to organisms in Nantucket Sound and reducing or avoiding entrainment losses that can result in the decline in fish stocks. In the case of the existing Brayton Point facility, EPA is working with all existing sources of marine water withdrawal to reduce their water usage and entrainment losses. Brayton Point Station has been required to construct cooling towers and to reduce their water usage by 95%.

Air Quality

In comments on the DEIS, EPA noted that MMS did not conduct a Conformity Determination for the project. In November 2008 MMS submitted a Draft Conformity Determination to EPA. EPA noted several issues with MMS's Draft Conformity Determination, and stated those concerns in a letter to MMS on December 30, 2008. The FEIS included the original Draft Conformity Determination in Appendix I which did not address any comments or concerns provided in EPA's December 30, 2008 letter. EPA recommends that MMS work with us to address those comments. A Conformity Determination will be necessary to support any Record of Decision for this project in the NEPA process, as well as the necessary air permit for the project. EPA urges MMS to coordinate carefully with both states involved in the Conformity Determination as well as EPA in advance of issuing a Final Conformity Determination. If there are no currently

available offsets from within the relevant nonattainment area, it may be possible to address the project's emissions within the applicable implementation plan, but that process would require substantial coordination with the state involved and EPA.

In addition to addressing those concerns, MMS needs to ensure that any revised Conformity Determination be consistent with any permits that EPA eventually issues for this project. EPA is currently reviewing the project's air permit application. While the Conformity Determination and the air permit need not be processed simultaneously, the results of both processes must be based on consistent assumptions about the project's operations and emissions.

There were inconsistencies between the FEIS and air permit application as to what equipment would actually be housed on the Electrical Service Platform (ESP). For example, the FEIS mentions that the ESP will have emergency generators (Section 2.6.3) and a diesel powered crane permanently in place on the platform (Section 5.3.1.5), while the air quality impacts discussion (Section 5.3.1.5) has no mention of emergency generators, and a footnote to Section 5.3.1.6 mentions that battery backup will be used in place of emergency generators on the ESP. In addition, the air permit application only mentions the crane and does not discuss any emergency generators. MMS needs to resolve these inconsistencies and provide EPA with consistent information in both the ROD and permit application that reflects the presence or absence of equipment with a potential to emit (PTE) on the ESP.

MMS should also consider requiring the applicant to limit diesel emissions during the construction and operational phases of the project through the use of cleaner fuels, emission controls on construction equipment or a combination of the two. For General Conformity purposes, this could decrease the amount of offsets the applicant would have to purchase because emissions from construction activities would be lower. This would be particularly significant in Rhode Island where offsets are in short supply.

Monitoring, Mitigation & Management

Enforceable monitoring and mitigation requirements for project construction and operation will be a critical component of any MMS authorization for the Cape Wind project. The FEIS provides reasons why the MMS has decided that "putting the applicant to the expense and level of detail required by a formal EMS is unnecessary for this project." The FEIS explains that "...the substantive requirements for mitigation and monitoring can be met through this EIS and ROD in a substantially similar manner, along with contributions and terms and conditions that are anticipated to be attached to several forthcoming pre-construction permits required by other federal and state agencies...." Given the scale of the project and its potential for moderate and major impacts to some organisms we believe that MMS has a responsibility under NEPA to provide a more complete accounting of the mitigation and monitoring it will require as part of project authorization. This is critical with respect to actions that will be required in response to unanticipated or unacceptable project impacts during construction or operation of the facility. As we communicated to MMS during development of the FEIS, we believe

MMS should, at a minimum, develop the monitoring, mitigation, and management plan with expert agency input and make this information available for public review prior to close of the NEPA process and in the ROD. The CEQ Regulations at 40 CFR 1505.2 (c) require that the ROD for an EIS, "State whether all practicable means to avoid or minimize environmental harm from the alternative selected have been adopted, and if not, why they were not. A monitoring and enforcement program shall be adopted and summarized where applicable for any mitigation."

The FEIS provides a description of how monitoring results will be reported on page 9-22. We support the FEIS commitment to make all reports submitted to MMS and FWS publically available and we encourage MMS to make raw data available should it be requested, consistent with CEQ's NEPA regulations at 40 CFR 1505.3 (c) and (d). Beyond the reporting requirements, it is not clear from the FEIS how decisions will be made in the future regarding operation of the wind farm based on impacts that are detected through monitoring. We believe that if the MMS monitoring plan is to be effective it needs to be expanded to describe the actions MMS will take should an unanticipated or unacceptable impact occur. The monitoring/mitigation plans should also include mechanisms to address time lags between the collection of monitoring data and management actions. As an example, as discussed in the FEIS, impacts to marine resources can be minimized, reduced, or avoided due to the development and implementation of a comprehensive oil spill planning that includes a description of responses (management actions) under various scenarios. Similarly, one would expect that other parts of the plan would describe impact thresholds and corresponding actions that would be taken by MMS and/or others including but not limited to state and federal agencies and Cape Wind. For example, if monitoring were to show that operation of the wind farm results in unacceptable mortality, avoidance/barrier, or other effects to birds, the plan needs to have identified the threshold for 'unacceptable' effects as defined by the agencies with jurisdiction and expertise in avian resources, and the range of actions that could be taken and would be required to address those impacts.

The MMS should also develop appropriate measures to analyze whether the management actions taken in response to monitoring have had the intended impact reduction/avoidance effect. The plan should provide for tracking and making available to the public the effects of decision-making made in response to monitoring data from the project over a sufficient period of time to monitor the effectiveness of the overall approach.

As we stated in our comments on the DEIS and in follow-up communications during development of the FEIS, we believe MMS should establish an interagency group responsible for working with MMS to develop relevant aspects of monitoring, mitigation and management of the project. Many of the federal agencies likely to have interest in the working group are also cooperating agencies. A role in the development of the specific items to be incorporated into the plan is a logical one for these agencies. We look forward to participating in those discussions in advance of the development of the ROD and for MMS to report the results of the coordination and the agreed upon enforceable mitigation plan in the ROD.